

REMARKS

The Office Action of January 5, 2010, has been carefully considered.

Claims 1-10 have been rejected under 35 USC 102(b) or in the alternative, under 35 USC 103(a) over Akamatsu et al.

Claim 1 has been amended to recite that the fabric has been treated by calendering, disclosed in paragraph [0037] of the application as published, and previously found in claims 3 and 6, and to recite a minimum cover factor of 1600, found in paragraph [0032] of the application as published.

Claims 4, 5, 8, and 9 have been canceled. New claim 11 recites a minimum thickness of 0.065 mm, as set forth in paragraph [0034] of the application as published.

Applicants submit that amended claim 1 is not anticipated by Akamatsu et al because:

- (i) the claimed invention is directed to a bag;
- (ii) the total cover factor of Akamatsu et al is less than 1600; and
- (iii) the downproof fabric which forms the claimed bag is a calendered fabric.

As to the first point, Akamatsu et al discloses a fabric with a high resistance to tearing, but it is not in the form of a bag.

Regarding the cover factor, this can be calculated as disclosed in paragraph [0032] of the published application, according to the equation:

$$CF = (\text{segment fineness})^{\frac{1}{2}} * (\text{number of segment yarns}/2.5 \text{ cm})$$

In the Office Action, a comparison is made between the fabrics of Akamatsu et al and those of the invention; Examples 21 and 22 of Akamatsu et al are thought to be specifically cited. The total cover factor of these fabrics can be calculated using the above equation.

In Akamatsu et al, the warp and weft weaving structure unit and densities are disclosed in columns 11 and 12.

Segment fineness should be averaged fineness of the fibers of the weaving structure. That can be calculated as follows:

(Segment fineness) = $\{[(20d*20)+(60d*A)+(20d*2)+(60d*1)]/24\} * [10000/9000]$ = 25.93, where [10000/9000] is the coefficient to convert *denier* to *dtex*.

(Number of segment yarns/2.5 cm) is 150, as described in col. 11, line 46 of Akamatsu et al.

Therefore, total cover factor of the fabrics of examples 21 and 22 is CF (warp and weft) = $25.93^2 * 150 = 763.8$. The total CF is $763.8 * 2 = 1528$.

These values are well below range of the claimed invention, which requires a total cover factor of not less than 1600.

Concerning the calendered fabric, Applicants make reference to the rejection of claims 3 and 7:

"As to claims 3 and 7, Akamatsu teaches the woven fabric is scoured, pre-heat set and dyed in a customary manner and then heat-treated under predetermined conditions (col. 9, lines 3-5) . Akamatsu teaches the filaments are fed through a feed roller and a nip roller (col. 6, lines 58-61) which is a process that is equated with calendering. Akamatsu differs and does not teach the fabric is calendered. Process limitations in claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "In re Thorpe, 227 USPO 964, 966 (Fed. Cir. 1985)

Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has

been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. See also *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPO 773 (Fed. Cir. 1985)

"Akamatsu teaches the properties of higher tear strength and lower air permeability is desirable. Akamatsu presents tear strength and air permeability values for the woven fabric in Table 4. Examples 21 and 22 employ the same yarn size and pattern as claimed. The tear strengths of Examples 21 and 22 are 1.72 and 2.00 kg which is equivalent to 17-19 N and in the claimed range of not lower than 7 N. The air permeability is 0.25 to 0.3 ml/cm²/sec which are in the claimed range of not higher than 1.2 ml/cm²/sec."

Fig. 2 of Akamatsu et al shows the treatment in manufacturing *polyester multifilament*:

In FIG. 2, undrawn polyester multifilaments 3 are fed to a feed roller 4 pressed by a nip roller 4a... (col. 6, lines 58-59)

Thus, the process of Akamatsu et al is not substantially identical to that of the invention, and there is no reason to believe that the products are substantially identical, or that a *prima facie* case of either anticipation or obviousness has been established.

The treatment of Figure 2 obtains a polyester

multifilament with properties recited in claim 2. Clearly, it is the yarn which is being treated, not the final fabric. While the Office Action appears to recognize the difference, it does not appear to recognize that the process difference results in an entirely different product.

According to the invention, it is the fabric which has been treated by calendering, which causes the structure of the fabric to fill interstitial spaces, and improves the waterproof and warmth retention qualities. This improvement does not occur as a result of calendering the yarn before formation of the fabric, as taught by Akamatsu et al.

Accordingly, the process alleged in the Office Action to be equivalent to calendering is not applied in the process of Akamatsu et al at to a fabric, only to a yarn, and the product formed from the treated yarn is therefore not the same as the fabric of the invention.

As to claim 11, Akamatsu et al does not disclose or suggest a fabric with a thickness of 0.065 mm or less.

Withdrawal of this rejection is requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



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